

IN THE CLAIMS:

Please amend claims 1, 17, 39 and 40 as follows.

1. (Currently Amended) A method, comprising:
encoding via at least one stage of a transceiver, said encoding being performed to
encode a frame using at least one of a plurality of codec modes, wherein an encoded
frame formed by ~~each~~ at least one of said codec modes comprises a plurality of
parameters,

wherein said at least one stage comprises:

first, calculating values for said plurality of parameters of the encoded
frame;

second, selecting one group of codec modes from a plurality of groups of
~~said~~ codec modes using said calculated values of said parameters, wherein each of
said groups of codec modes comprises at least one ~~of said codec modes~~ speech
processing algorithm and comprises a common parameter characteristic, wherein
the selection is performed according to at least one of

prior to calculating a linear prediction coding operation,

after calculating a linear prediction coding operation and prior to
calculating a long term prediction operation, and

after calculating a linear prediction coding operation and a long term
prediction operation; and

third, encoding the frame with ~~one of the codec modes~~ at least one of the speech processing algorithms from the selected group of codec modes in dependence on said common parameter characteristic.

2. (Previously Presented) A method as claimed in claim 1, comprising a plurality of said stages.

3. (Previously Presented) A method as claimed in claim 1, wherein the parameters comprise one or more of: a voice activity detection flag, a long term prediction filtering flag parameter, an immittance spectral pair parameter, a pitch delay parameter, an algebraic codebook parameter, a gain parameter and a high-band energy parameter.

4. (Previously Presented) A method as claimed in claim 3, wherein the parameter characteristic is a bit size of the parameter.

5. (Original) A method as claimed in claim 1, wherein the frame is a speech frame.

6. (Previously Presented) A method as claimed in claim 1, wherein the selected group consists of one or more of said codec modes.

7. (Previously Presented) A method as claimed in claim 1, wherein the selecting said one codec mode group is in dependence on determined parameters determined from the encoding of the frame.

8. (Previously Presented) A method as claimed in claim 7, wherein the determined parameters are compared to threshold values.

9. (Original) A method as claimed in claim 8, wherein the one of the codec modes selected to encode the frame is dependent on the comparison of the threshold values.

10. (Previously Presented) A method as claimed in claim 8, wherein the threshold values are dependent on a target bit rate.

11. (Previously Presented) A method as claimed in claim 8, wherein the threshold values are stored in a tuning table, the tuning table comprising threshold values for each of the parameters corresponding to each of the plurality of codec modes.

12. (Previously Presented) A method as claimed in claim 1, wherein each of the plurality of codec modes defines a bit rate for encoding the frame.

13. (Previously Presented) A method as claimed in claim 1, wherein said at least one stage being arranged to have a group with a codec mode with a lowest bit rate and another group with remaining codec modes.

14. (Previously Presented) A method as claimed in claim 13 comprising at least two stages, wherein said first stage being arranged to have two groups and said second stage being arranged to have at least three groups, wherein at least two of the groups of the second stage are contained in one of the groups of the first stage.

15. (Original) A method as claimed in claim 14 comprising three stages, wherein in said third stage, said frame is encoded by one of said plurality of codec modes.

16. (Original) A method as claimed in claim 1, wherein the plurality of codec modes are codec modes of an adaptive multi rate codec.

17. (Currently Amended) An apparatus, comprising
a processor configured to calculate values for a plurality of parameters of a frame, wherein the frame is configured to be encoded using at least one of a plurality of codec

modes, wherein an encoded frame formed by ~~each~~ at least one of said codec modes comprises said plurality of parameters;

selecting circuitry configured to select, after said calculation of the frame parameters, one group of codec modes from a plurality of groups of ~~said~~ codec modes based on said calculated values of said parameters, wherein each of the groups of codec modes comprises at least one ~~of said codec modes~~ speech processing algorithm and comprises a common parameter characteristic, wherein the selection is performed according to at least one of

prior to calculating a linear prediction coding operation,

after calculating a linear prediction coding operation and prior to calculating a long term prediction operation, and

after calculating a linear prediction coding operation and a long term prediction operation; and

an encoder configured to encode, after said selecting of the group of codec modes, the frame with ~~one of the codec modes~~ at least one of the speech processing algorithms from the selected group of codec modes in dependence on said common parameter characteristic.

18. (Cancelled)

19. (Previously Presented) An apparatus as claimed in claim 17, wherein the parameters comprise one or more of: a voice activity detection flag, a long term prediction an filtering flag parameter, an immitance spectral pair parameter, a pitch delay parameter, an algebraic codebook parameter, a gain parameter and a high-band energy parameter.

20. (Previously Presented) An apparatus as claimed in claim 19, wherein the parameter characteristic is a bit size of the parameter.

21. (Original) An apparatus as claimed in claim 17, wherein the frame is a speech frame.

22-38. (Cancelled)

39. (Currently Amended) An apparatus, comprising:
processing means for ~~calculate~~ calculating values for a plurality of parameters of a frame, wherein the frame is configured to be encoded using at least one of a plurality of codec modes, wherein an encoded frame formed by ~~each~~ at least one of said codec modes comprises said plurality of parameters, ~~wherein the parameters, which~~ which comprise one or more of a voice activity detection flag, a long term prediction filtering flag parameter, an

immitance spectral pair parameter, a pitch delay parameter, an algebraic codebook parameter, a gain parameter and a high-band energy parameter;;

selecting means for ~~receiving said on said calculated values of said parameters and~~
selecting from a plurality of groups of codec modes one group of codec modes based on
said calculated values of said parameters, wherein each of said groups of codec modes
comprises at least one ~~of said codec modes~~ speech processing algorithm and comprises a
common parameter characteristic, wherein the selecting is performed according to at least
one of

prior to calculating a linear prediction coding operation,

after calculating a linear prediction coding operation and prior to
calculating a long term prediction operation, and

after calculating a linear prediction coding operation and a long term
prediction operation; and

encoding means for receiving information identifying said selected group of codec
modes and encoding the frame with ~~one of the codec modes~~ at least one of the speech
processing algorithms from the selected group of codec modes in dependence on said
common parameter characteristic.

40. (Currently Amended) A computer program embodied on a computer-readable
medium configured to control a processor to perform:

encoding via at least one stage of a transceiver, said encoding being performed to
encode a frame using at least one of a plurality of codec modes, wherein an encoded
frame formed by ~~each~~ at least one of said codec modes comprises a plurality of
parameters,

wherein said at least one stage comprises:

first, calculating values for said plurality of parameters of the encoded
frame;

second, selecting one group of codec modes from a plurality of groups of
~~said~~ codec modes using said calculated values of said parameters, wherein each of
said groups of codec modes comprises at least one ~~of said codec modes~~ speech
processing algorithms and comprises a common parameter characteristic, wherein
the selection is performed according to at least one of

prior to calculating a linear prediction coding operation,

after calculating a linear prediction coding operation and prior to
calculating a long term prediction operation, and

after calculating a linear prediction coding operation and a long term
prediction operation; and

third, encoding the frame with one of the codec modes from the selected
group in dependence on said common parameter characteristic.